NQS SUBMIT COMMAND

To submit a job to NQS, the following command is used:

$ qsub myscript

where *myscript* is a file that contains the *qsub* options for the given job.

DIRECTIVE SYNTAX

These options are given in the form of

#QSUB option [value]

or

#QSUB option=value

where some options may require values to be included. No spaces are allowed in the "option=value" line!

Typically, the first line in the script is the specific shell under which the script should be executed. For example,

#!/bin/ksh

would run the script under ksh.

JOB ENVIRONMENT DIRECTIVES

Control the environment in which the qprep script operates.

Directive	Options	Description
-A	Account name	Charge the specified account name.
-u	User name	Run the job as the specified user.
-x	NONE	Export the environment.

REPORTING DIRECTIVES

Control standard output, error, and mail reporting.

Directive	Options	Description
-o	File	Define standard output file.
-e	File	Define standard error file.
-eo	NONE	Merge standard error and output.
-mb	NONE	Send mail when job begins.
-me	NONE	Send mail when job ends.
-mr	NONE	Send mail when job reruns.
-mu	E-mail address	Send mail to address.

JOB CONTROL DIRECTIVES

Specify how and where to run a job.

Directive	Options	Description
-q	Name	Name of the queue.
-r	Name	Name of the job.
-nc	NONE	Do NOT checkpoint the job.
-nr	NONE	Do NOT rerun the job.
-la	Attributes	Restrict this job to the queues with these attributes.
-a	Date and/or time	The earliest time to run the job.

LIMIT DIRECTIVES

Specify resource limits to run a job. Note that all times can be specified as

[[hours:]minutes:]seconds[.milliseconds]

As an example, the following are valid times:

Time	Explanation
12345	12,345 seconds
121.1005	121.1005 seconds
30:10	30 minutes and 10 seconds
12:00:00	12 hours, 0 minutes, and 0 seconds
10:30:10.5	10 hours, 30 minutes, and 10.5 seconds

The units of memory can be specified as

- b (bytes)
- w (words)
- Kb (Kilobytes)
- Kw (Kilowords)
- Mb (Megabytes)
- Mw (Megawords)
- Gb (Gigabytes)
- Gw (Gigawords)

In the absence of any unit, bytes are assumed.

Directive	Options	Description
-l mpp_p=	Number	Number of CPUs to be used for the job.
-l mpp_t=	Time	Maximum wall-clock time for a ALL processes.
-l p_mpp_t=	Time	Maximum wall-clock time for a single process.
-lt	Time	Maximum time used by a single process running on a command PE.
-lT	Time	Maximum time used by ALL processes running on the command PEs.
-lc	Limit	Per-process core file size limit.
-lf	Limit	Maximum amount of file space for a single process.
-lF	Limit	Maximum amount of file space for ALL processes.
-lm	Limit	Maximum amount of memory for a single process.
-lM	Limit	Maximum amount of memory for ALL processes.